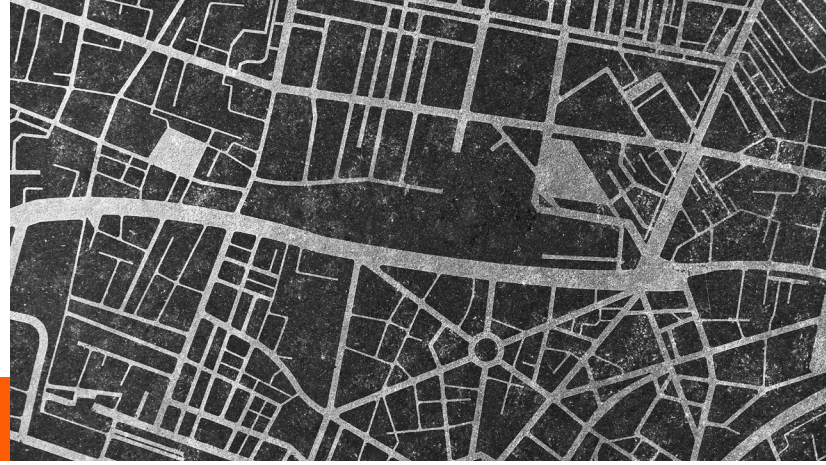


Connecting Streets to Reduce Cars

Built Environment



Climate Issue: Transport Emissions

Dependence on cars harms cities in a number of ways:

- High GHG emissions
- Increased air pollution
- Costly infrastructure
- Increased social isolation
- Physical health issues related to sedentary living .

To combat climate change and improve the health of residents, we must reduce the use of cars in cities.

Disconnected street networks
can “lock-in” unsustainable transport
behavior for years to come

Solution: Building Connected Streets

Science shows that **street connectivity** plays a **fundamental role** in vehicle usage.

- Disconnected street networks increase the distance between residential land uses and essential services
- This results in car dependency
- Globally, street networks in new developments have become less connected since 1975
- Building disconnected street networks “locks-in” unsustainable transport behaviors.

CONNECTED —————> DISCONNECTED



Barrington-Leigh & Millard-Ball, 2022

It’s important for cities to tackle this problem now, as **streets have high permanency**: once built it is unlikely their layout will change.

- Highly connected street networks allow for diverse and sustainable forms of transport, such as walking, cycling, and scootering
- Transport diversity lowers dependence on cars
- These forms of transport can also improve public health and social outcomes.

APPROVE

- Grid street networks
- Small- to medium-sized city blocks
- Lane ways that intersect blocks
- Dedicated pedestrian pathways
- Dedicated cycle lanes.

AVOID

- Dead-end streets
- Cul-de-sacs
- Circuitous street networks
- Gated communities
- Supersized city blocks.

WHAT CAN YOUR CITY DO?

CREATE urban planning policy that mandates new development has highly connected street networks, such as fine-grain grids and lane ways

CREATE policy that prohibits or discourages disconnected street networks

IMPLEMENT a “Cul-de-tax”, whereby dead-end streets are taxed

UPDATE city, state and national design guidance to emphasize importance of pedestrian permeability

INVEST in sustainable transport infrastructure, such as dedicated cycle lanes and pedestrian pathways.